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Original Communications.

CASE OF BILATERAL PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS IN A CASE OF SYPHILIS.

Reported by F. I. KNIGHT, M.D., one of the Physicians to Out-patients at the Boston City Hospital.

ON the 9th of August, 1869, a patient was referred to me by Dr. Ropes, one of the visiting surgeons to the Hospital, to ascertain if a tracheotomy tube which had been inserted five months previously, on account of excessive dyspnœa, could with propriety be removed. I recognized the patient as one whom I had treated, in September, 1868, for syphilitic affection of the mucous membrane of the larynx.

On laryngoscopic examination, the vocal cords were seen to be both lying near the median line. On respiration, there was no rotation of the arytenoids outwards, and the cords remained near the median line.

The voice was loud, somewhat hoarse. On phonation, the cartilages of Santorini both moved, but only the left cord, which was closely approximated to the right, and both were set in vibration by the expelled air. There was no ulceration or swelling, or other sign of inflammation in the larynx.

The affection which caused the dyspnœa, necessitating tracheotomy, and which of course would necessitate the longer wearing of the tube, was evidently paralysis of the posterior crico-arytenoid muscles.

The history of this patient, as obtained in September, 1868, was as follows:—

——, male, age 36, ship-carpenter by trade. Sent to me by Dr. R. M. Ingalls, of East Boston.

Family History.—Father died of "paralysis"; mother of disease not known. They had six children, all of whom are living, and well as far as is known to patient, but he has not seen some of them for eight or ten years.

Patient had good health when young. He had measles in 1850, and typhoid fever in 1857, from both of which he fully recovered. He had gonorrhœa in 1854, lasting four or five months; had urinary fistula. At this time had also "little ulcers" on penis, "which never troubled him," and healed readily. He remembers having swellings in groin at this time. Six months afterwards, he had an eruption on head. At intervals since then he has had an eruption on his body, and rheumatism. He has occasionally had sore throat, and much frontal headache. He served in the U. S. Army throughout the late war, and enjoyed good general health.

One year ago, that is in September, 1867, he began to fail in strength; his muscles began to get flabby. In December, 1867, his voice began to be hoarse. Since then he has been much reduced in flesh and strength, though for the past two months he has been gaining somewhat in the country. He has done no work since February, 1868. He has no cough. Appetite good. Is not in the habit of taking stimulants. No dyspepsia. Bowels regular. Micturition free. Patient of light complexion, sandy hair and beard; not emaciated. Pulse 90, soft, not very strong. Voice very hoarse.

On laryngoscopic examination at this time, the left vocal cord and left ventricular band were found to be much congested and swollen.

I ordered him potassii iodidi gr. xv. ter die, a generous diet, and began making applications of tinct. iodinii co. and glycerine to the left cord and ventricular band. His voice improved for a week, when he presented himself laboring under a severe cold, with stiff neck, sore throat, &c. He went into the English Provinces, and I saw no more of him until he presented himself at the hospital, Aug. 9th, 1869.

Paralysis of the respiratory muscles on each side of the larynx is fortunately quite

rare. The cause of it is usually not easily determined; but when it occurs simultaneously on both sides, it may be suspected to be of central origin. In this case we may suspect a syphilitic tumor at the origin of the nerves sending those motor filaments to the pneumogastric which supply the respiratory muscles.

The prognosis is unfavorable, but there is a possibility that a syphilitic growth, *e. g.* a gummy tumor, might disappear under specific treatment. To make sure that this had not already taken place, and left the muscles paralyzed from disuse, I made repeated applications of electricity, with no beneficial result. The application of electricity of any kind in a case like this would be extremely hazardous, unless tracheotomy had previously been performed.

"WATERMELON vs. DIARRHŒA." OTHER CASES.

By B. E. Cotting, M.D.

Having had occasional experience in times past in the practice above indicated, as recommended by Drs. Webber and Buckingham in papers which I found on my table on return from a recent short vacation, I readily recurred to it as opportunity offered in the following cases.

I.—An advanced gentlewoman, taken Friday night, Sept. 3d, with prostrating diarrhœa, was, on Saturday, P.M., advised to take very freely of the pulp of ripe watermelon. She did so, eating as much as she could possibly get down. During Saturday night she had five dejections—the last being very small, about 6, A.M., of Sunday. She kept her bed Sunday, without discomfort, except a feeling of weakness. Monday, she had a natural dejection, and no further disorder.

II.—A middle-aged gentleman, taken Saturday, Sept. 4th, with cholera morbus, and brought home from his place of business. Seen at nightfall; vomiting frequent and diarrhœa urgent. Watermelon directed as above. Directions followed, but he also continued to take the melon in small quantities every few minutes during the night, to assuage thirst. He vomited but once after it was taken, and the diarrhœa ceased during the night.

III.—A young woman, who, for several days, had suffered severely from diarrhœa which had not been controlled by opium freely taken, and other remedies, being unable to sit up any longer, took to her bed, Sept 6th, and asked professional advice. Watermelon directed, as in the previously described cases. She took it repeatedly in pretty large quantities in the night and day following. Feeling no relief, she sent again at evening, but before the messenger returned she had a large dejection, which she said seemed to remove all the difficulty. From that moment convalescence was uninterrupted.

IV.—An older gentlewoman, the head of the same family as the last, afflicted at the same time, in a similar way though less severely, was relieved in about half the time of the other, after taking watermelon.

V.—A young gentleman, attacked in the night of September 12th, with severe vomiting and purging, which continued into the 13th, was advised to take watermelon, and took a large quantity. The disorder ceased in P.M., and the next day, Sept. 14th, he returned, well, to his business.

VI.—A grandmother, much depressed by attending upon sick children, returned home with distressing diarrhœa Sept. 13th. The next day, was directed to take watermelon, and consumed large quantities between the middle of that day and the morning following. After this she had no further diarrhœa.

VII.—A rather feeble young woman, after several days' suffering with frequent loose, "bilious" operations, took, as directed, in the evening and night of Sept. 15th and on the morning of the 16th, three separate meals of watermelon alone. In the afternoon of the 16th she had a full dejection, and no diarrhœa afterwards.

VIII.—A young matron, who had had repeatedly recurring attacks of diarrhœa, and had tried without avail laudanum and other common remedies, was at last obliged to take to her bed, and then, as advised, ate in course of the night of Sept. 16th to 17th about "a cubic half-foot" of watermelon pulp. This was followed by a free dejection, "quite different from the previous ones," before noon of the 17th, and subsequent complete relief.

IX.—A young gentlewoman, on her return from a fatiguing journey, was taken in the night of Sept. 17th with diarrhœa, accompanied with constant nausea, which greatly increased on every attempt to rise from the bed. In the afternoon of the 18th, these symptoms increasing, she was advised to take watermelon pulp, which she did until she was "full." It was repeated at bed-time, and again in the morning following.

She said that the nausea was at once and decidedly relieved by the watermelon, and,

after a free dejection on the 19th, she had no further diarrhœa.

For obvious reasons, only those cases have been cited in which watermelon was the only treatment.

If these are cases of *post hoc*, as they may be, relief came immediately *after* a much pleasanter and less injurious treatment than often resorted to in such complaints, and their histories may furnish fruitful suggestions to the considerate and thoughtful practitioner who may wish to avoid "Abuse of the Alimentary Canal."

PRIMARY DRESSINGS AFTER AMPUTATIONS.

By T. H. Squire, M.D., Elmira, N. Y.

In the Boston Medical and Surgical Journal for Aug. 19, 1869, some surgical cases occurring in the service of Dr. Geo. Derby, Boston City Hospital, are reported by Mr. Geo. Stevens.

The title of the first case is—"*Amputation of the Thigh for Injuries; Death from Pyæmia.*"

In speaking of the dressing, the reporter says:—"The skin of the flaps was extremely tense. Nine ligatures were applied, the flaps brought together with silk sutures, and the face of the stump covered with a cold compress and a tight bandage. * * * Three days after the operation, the sutures were removed; the edges of the flaps were then looking black and sloughy. * * * For a little more than three weeks everything went on as favorably as could be expected; a large abscess formed on the outer side of the thigh, but incisions evacuated it; the sloughs of the flaps separated, and the face of the stump presented a healthy granulating surface. * * * On the twenty-fifth day after the operation, the patient was seized with a severe chill in the morning, and again in the afternoon. One week later he had another chill, vomiting, diarrhœa, and pain in the abdomen, which was somewhat tympanitic. * * * In two days more the discharge from the stump had nearly ceased, and its face presented a dry, shiny appearance. He died the next day."

The title of the second case is—"*Amputation of Thigh for Chronic Disease of the Knee-joint; Death from Pyæmia.*"

"The thigh was amputated at the lower third, by the circular method. An unusual number of vessels required ligatures. Silk sutures; cold compress; tight bandage. In two days the bandage was removed; the flaps were in perfect apposition, with no tension of the sutures. Three days later, the patient had a severe chill; the removal of the sutures let out a considerable amount of thin, watery pus. On the following day he had another chill. He continued to fail during the next three days, and he died on the ninth day after the operation."

Now, there are surgeons who, if called upon for an opinion in relation to the surgical dressings in these two cases, would say that they were directly calculated to favor the results which followed. There are those who believe we cannot, in such cases, entirely close the flaps over the sawed extremity of bone, with its injured medulla, apply a tight bandage, and then reasonably expect the whole to adhere and progress to a favorable termination, without any suppuration, granulation, or discharge. Surgeons, whose teaching, reflection and experience have led them to this belief, would recommend that, in amputating the thigh at the lower third, the operator, with a scalpel, first make two symmetrical, tegumentary flaps, sufficiently large to cover the included tissues, without strain or tension, and that, after circular division of muscles and bone, these flaps, with silver pins, be accurately adjusted throughout two thirds of their extent, the other third being allowed to gape freely; and that, with plasters to complete the design of the pins, no other dressings be applied, save an evaporating cloth frequently wet in cold water—the stump during the process of healing being gently supported by a concave cushion, to favor union by first intention, to the extent desired; and, also, to favor union, by second intention, in the remaining part of the wound. The results in this mode of operating and dressing are usually very favorable.

If the surgeons of the Boston City Hospital sanction the complete closure of the flaps and the application of a tight bandage, in cases like those under consideration, they can, doubtless, refer to some lucid defence of the doctrine in standard authority, or bring forward statistics in support of the practice. Until such vindication is produced, it is believed that surgeons will prefer to leave the flaps gaping at one angle of the wound, and to dispense with all tight dressings.

Iodine Gargle.—M. Cullerier prescribes the following in syphilitic ulceration of the mouth and throat, and in œzena;—Iodide pot. 1 part, honey syrup 30, and decoction of barley 120 parts.—*Union Médicale.*

Selected Papers.

CASE OF CALCULUS SUCCESSFULLY REMOVED FROM A CAVITY IN THE KIDNEY.

By Thomas Annandale, F.R.S.E., Lecturer on Surgery, Edinburgh.

Mr. S., æt. 42, recommended by Dr. James Forrest, of Stirling, came to my house on the 9th of April, 1869, on account of a small fistula in his left loin. The patient gave me the following history of his case: One year ago he felt, for the first time, a slight pain in his left loin, which occasionally passed down into his abdomen; was never severe, and was usually relieved by rubbing the part with a little laudanum. A few months after the first pain a swelling formed in his left loin, and was opened by Dr. Forrest, with the result of giving exit to several ounces of healthy-looking pus. The wound remained open, and continued to discharge pus, but he suffered no inconvenience, and only had an occasional slight pain in the loins. There were never any urinary symptoms, nor was there at any time any blood, mucus or pus in his urine. No urine ever passed through the fistula. Three months after the abscess was opened a small calculus, of a triangular shape, passed through the wound, and a few days after Dr. Forrest removed some small gritty particles from the margins of the sinus. One month after this the wound had healed, but required again to be opened, and some more portions of soft calculous matter were extracted. After this the wound contracted very much, and no more calculi passed; but as the sinus still remained open, at the end of several months my advice was asked on the case.

An examination of the patient showed a small sinus, with a depressed orifice, situated in the left loin, about three inches from the spines of the vertebræ, and immediately below the last rib. There was no swelling or enlargement of the surrounding parts, and no tenderness on pressure. A fine probe, introduced into the sinus, passed down for a depth of three inches, and after a little search its point struck a hard body, which was, without doubt, a stone. Being anxious to ascertain more surely the size and position of the calculus, I proposed to the patient to enlarge the sinus, in order to get my finger introduced. He at once consented, so, having freely incised its superficial margins, I was enabled to get the point of my finger into the sinus, and then, partly by dilatation and partly by cutting, I succeeded in touching the stone, but not until the entire length of my finger had been passed into the wound. The stone lay in a cavity, which appeared to communicate with the sinus by a limited opening, as a considerable portion of the stone was felt to be covered by a soft membranous substance. From the depth of its situation, and from the feel of the surrounding parts, I felt very certain that the stone was lying in a cyst or cavity of the kidney itself. Having proceeded so far, I determined to extract the stone, and accordingly enlarged the wound freely, carefully cutting the deeper portions with a probe-pointed bistoury. A pair of dressing forceps was then introduced, and the stone readily seized, but it seemed to be caught at one or two points, and would not leave its cavity. After one or two attempts, however, I managed to lay hold of the stone obliquely, and to draw it out. The patient, who had complained of great pain in the abdomen while I was touching the deeper part of the wound, bore the operation with great fortitude, and after a few minutes went to a friend's house in a cab. Next day he returned home to Stirling, and, although he was feverish and suffered from pain in the abdomen for a few days, he made a good recovery, and was soon back again to his employment as a photographer. Two days ago (June 1st), I received a letter from my patient to tell me that he had been at his work regularly for the last three weeks, and that the wound was rapidly closing. He has no pain or uneasiness of any kind now.

The stone removed is represented of natural size [wood-cut omitted.—Ed.]; it weighed seventy-two grains, was of an elongated shape, and had two branches or processes at one end, and a third process springing from its body. Its length was one and a half inches, and its diameter at the thickest portion was a little more than half an inch. Externally the stone was white in color, but here and there a brown hue showed itself through the external layer of phosphates. A section showed a nucleus the size of a small pea, of a dark brown, almost black color. Outside this the color was a lighter brown, and the structure was arranged irregularly and in many lines. Here and there the section showed distinctly an outer thin layer of phosphates. Dr. Arthur Gamgee was good enough to analyze

the stone for me, and the following is his report:—

Constituents in 100 *parts.*

Phosphate of calcium, magnesia and ammonium	14·20
Oxalate of calcium	73·35
Organic matter and moisture	12·45
	100·00

Remarks.—This case is an interesting example of one of the results which occasionally follow the formation and lodgment of a calculus in the kidney. From the composition, shape, and situation of the stone, there is little doubt that it had formed in the kidney, and had given rise to changes in the structure of that organ, such as have been described by Sir B. Brodie,* Prout,† Rayer,‡ Johnson,§ and other authors, and to the abscess and consequent fistula.

Abscesses forming in connection with renal calculi have given rise to fistulous openings in other situations than the loins. Rayer,‖ referring to renal fistulæ, says:—"These fistulæ, caused in most cases by the presence of one or more stones in the pelvis or ureter, may open into the cellular tissue external to the peritoneum, into the external lumbar region or near the crural arch, into the colon or duodeneum, into the cavity of the peritoneum, or, lastly, into the pleura or lung corresponding to the affected kidney."

When Demonstrator of Anatomy in the University, in the year 1864, my attention was directed to a male subject, about fifty years of age, which had several small fistulous openings in the right loin. These fistulæ passed down in the direction of the right kidney, and small portions of the last two ribs had been absorbed. The right kidney was found to be hollowed into a cyst, and in it lay the calculus. I could obtain no history of this case, but feel sure that the stone could have been removed with safety during life.—*Medical Press and Circular.*

THE OXALATE OF CERIUM IN DYSPECTIC VOMITING.

By S. A. Lucas, L.R.C.P. & S. Edin., Kirkdale, Liverpool.

I fully agree with Dr. Curran as to the beneficial effects of the oxalate of cerium in the nausea of pregnancy. I have employed it for vomiting from various causes, with good effect. I have had a case lately of dyspeptic vomiting, where its *tonic* and *sedative* effects were well marked. The patient, a married lady, had been attended by a doctor for two months, suffering from severe vomiting many times in the day. The doctor tried many remedies—bismuth, chlor. potass., lime-water, creasote, hydrocyanic acid, &c.—without giving relief to the patient; he gave the case up. I was sent for, and found the lady suffering from facial neuralgia, as well as the vomiting. I prescribed a liniment to be applied to the face (equal parts of lin. chloroformi and lin. belladonnæ), and put her at once upon—

℞ Cerii oxal., gr. xxxvj.
Ext. hyos., gr. xxiv.
Div. in pil. xij.; cap. j. ter in die.

For two days afterward she had no vomiting; on the third day she vomited once, which I believe due to her having eaten potatoes (quite against my prescribed regimen). I made her go out for a short walk every day, and by the end of the week vomiting and neuralgia had disappeared, and her health rapidly returned.

It may be seen from this that the oxalate of cerium in its maximum dose (gr. iij.) effected a cure where all other well-known remedies failed; and I hope the profession will give an extended trial to a drug that has not received the attention it merits since its introduction by Professor Simpson.—*Ibid.*

* Lectures on Diseases of the Urinary Organs.
† On the Nature and Treatment of Stomach and Urinary Diseases.
‡ Maladies des Reins. § Johnson on the Kidney.
‖ Loc. cit., page 275.

Bibliographical Notices.

*Report of the Trial of Samuel M. Andrews, Indicted for the Murder of Cornelius Holmes, * * * including the Rulings of the Court upon many Questions of Law, and a full Statement of Authorities upon the Subject of Transitory Insanity.* By Charles G. Davis, of Counsel for the Prisoner. New York: Hurd and Houghton. 1869.

This handsomely and quite correctly printed pamphlet of 288 pages is published because the trial was of such great public interest and legal importance. The report is quite full, especially of the arguments, and though the version given of the testimony is that of the defence, and it is possible that revision has given strength to portions of it, it is undoubtedly in the main accurate and fair. This trial has much interest for the medical profession by reason of the questions involved, and the testimony introduced.

Cornelius Holmes was a man of large

frame and rather weak mind; with a strong friendship for Andrews, who bore a good reputation and peaceable character, and was considerably smaller than Holmes; and they were very intimate. Holmes had executed a will, by which Andrews would largely benefit, and this was in Andrews's possession. Andrews sent a note to Holmes, as was not unusual, saying that if Holmes wished to see him before going away, he would be found in his garden that same evening. They met, and were seen in the garden, and afterwards, as Andrews testified, went together to the place where he killed him, which was a cart-path near a cemetery, about thirty rods from any house, as it appears by the plans appended to the report. Andrews testified that here Holmes threw him down, and made an indecent assault upon him; and that similar attempts had been made before at various times, without interrupting their friendly relations; and that he struck Holmes's head with stones in self defence, but that he had no recollection what took place after first striking him, as they rolled off a bank, until he found himself throwing two stones at him, down in the road. Here the body was found the next day, lying face downward, the clothes buttoned, with one knee drawn up, the arms crumpled underneath, the hands clinched together, the back of the head beaten in and the brains oozing out. There were pools of blood at some distance from the body, and stones lay about with blood and brains on them. Andrews returned to his house after the deed, partially divested himself of the traces of the struggle, conversed with various people, and, as he said, did everything he could to secrete everything, and to convince people that he was an innocent man. The next day, before the body was found, Andrews began to talk of the will; and at the inquest, asked advice about taking it to the probate office, and, that evening, did deposit it there. Being subject to frequent headaches, he complained of feeling ill and appeared uneasy at various times for several days after the deed, and, as was his habit, inhaled ether on this account. After his arrest, but before his guilt was known, he went by request to see the body, and kissed the face, spoke of his affection for the deceased, and offered to take charge of the funeral. At the trial on one occasion Andrews made a sudden exclamation, and afterwards said he thought some one struck him. He also testified that while at the jail he heard familiar voices speak of hanging him. At this time the turnkey noticed that for a day and a half he appeared disinclined to speak; but after being told that they would "put him in with other fellows, who would stir him up," his conduct *ceased to be peculiar*. When giving testimony, Andrews appeared to be perfectly sound and clear in mind; and nothing had ever been observed by his family or friends which would throw the least suspicion on his sanity.

The insanity of his ancestry was shown to the following extent:—His great grandmother was insane. She had six children, five of whom were insane, and the other, Andrews's grandmother, not insane. She had six children, of whom only the mother of the prisoner was insane. Her disorder existed for some years before and after his birth. She had three other children, none of whom are known to have been insane.

Upon these facts the defence of "insane impulse," or "mania transitoria," was based, and the attack was assumed to correspond in duration to the interval of which Andrews said he had "no recollection," between the first and last blows of the conflict. The counsel, as is the custom in court, wilfully and helplessly floundered in a mass of confusion and misstatement respecting insanity in general, and its application to this case in particular, laying great stress upon "insane milk" and "insane blood," and taking the ground, contrary to the expert testimony, that the evidence of the personal conflict and the necessity for self-defence would *increase* instead of diminishing the probability of the homicide being due to insanity; and Mr. Somerby regarded the *calmness* of the prisoner at the trial as sufficient proof of the same disorder!

Dr. H. J. Bigelow testified to the extent of the injuries, and as to how the weapons must have been used; an especially interesting point being that so extensive injuries could not be inflicted from below upwards upon a standing man.

Dr. J. C. White's testimony as to the chemical and microscopical examination of blood stains is interesting and instructive. The blue color produced by the oxidation of guaiacum through the agency of the coloring matter of the blood, and the formation of hæmin crystals, furnished proof positive of the nature of the stains.

Dr. Edward Jarvis was called by the defence as an expert in insanity. On the evidence, he thought the prisoner had a "maniac paroxysm" at the time of the struggle, lasting "five or twenty minutes," and beginning with the first blow struck. He had no doubt of his soundness before and after

this attack. He stated that there is a kind of insanity known as mania transitoria, *which may attack a man never before insane, last not more than ten minutes, and leave him sane, and never return.* This unsafe and erroneous doctrine the witness based upon a cumulus of citations from various authors, which were not allowed to be read in Court, but which were lately published in this Journal, and are to be found in the Appendix to the Report. It is assumed rather vaguely that "seventy-five to one hundred" cases of this form of insanity have been recorded. But of those given, the account is so meagre that they prove absolutely nothing, and in many of those referred to, there are various delusions and irregularities of mind which were *not* transitory. Authorities agree that many *insane persons* are subject to paroxysms of violence. No fact is more familiar. But the authorities of the present day, and some of the very ones ingeniously quoted by Dr. Jarvis, expressly disclaim and deny that such a thing as transitory insanity, only manifested by a single act of violence, does exist, or could be distinguished from ordinary crime if it did. The origin of this scientific crotchet seems to have been with Esquirol, and the cases which he reported, occurring within the space of a few years, have come down to us as rare specimens of exceptional disease, of interest as curiosities, of questionable genuineness, and without much practical bearing. Homicidal maniacs form only a small proportion of the total number of persons who become insane: if there were such a thing as momentary insanity the unsurpassed methods of observing and recording cases of insanity at the present day would show such a form to exist, and we should find a *due proportion* to be homicidal. But *all* the cases reported as transitory are homicidal in character! This is significant. Where are the cases *not* homicidal, which ought to be in majority? We must guard against the danger, great at the present day, of letting a high sounding *foreign name* go far as authority with us, when in reality our powers and opportunities of observation in this country may be not inferior, and we are not so much hampered with the burthen of the dead past. As an offset to the dictum of Messrs. Castelnau and Devergie, quoted by Dr. Jarvis, we claim that the first well-attested case of transitory or momentary insanity, in this country, has yet to be found. Statistics show that cases of brief duration are rare in proportion to their brevity. The very number of the cases given by Esquirol as occurring in so short a period as five or six years, is a discrepancy which of itself throws doubt on his observations. Dr. Bucknill, an authority quoted by Dr. Jarvis, says that the existence of Esquirol's class of homicidal cases, in whom the impulse is "sudden, instantaneous, unreflected on, and stronger than the will," admits of grave doubts; that the testimony in favor of the existence of such a variety is very scanty and unsatisfactory, and it is improbable that cerebro-mental disease can be developed in so rapid a manner. He dissents from Esquirol's monstrous conception of a *lesion de volunté*—a will alone disordered, without other mental disturbance. Nor, according to Dr. Ray, did Esquirol himself always hold the notion of the existence of homicidal insanity unconnected with other mental alienation. Every practical mind will perceive the danger to society of admitting the plea of insanity when the act of violence is the only evidence of the disorder.

By Dr. Jarvis's testimony it appears that his practical experience in observing insanity is extremely limited—his learning no one questions—but he does not assume that he ever observed a case of momentary insanity, or that he knows that one ever existed. His attitude is that of an advocate trying to make out a case, rather than that of an impartial expert. Considering the slender grounds upon which he based his opinion that the prisoner was insane, no one can feel surprise that the jury did not coincide with him. Their verdict was manslaughter.

Dr. Choate's testimony directly controverted that of Dr. Jarvis. With full acquaintance with the authorities, with large experience, and possessing as well, we may add, that practical turn of mind so necessary in a medical expert, he did not give credence to the existence of instantaneous insanity at all. And, taking the evidence as true, he regarded the prisoner as sane. Evidence of insane ancestry, he testified (however strongly proven), is of no value in a given case, without *direct* evidence of insanity, which in the prisoner's case did not exist. The fact that a man was under constant observation and appeared sane down to an hour at least before the homicide, and then a half hour afterwards, was conclusive to his mind that the homicidal act was not in consequence of disease and did not spring from insanity. The evidence of motive, selection of time and place, and the concealment afterwards, were all against insanity, and influenced his opinion. The report is erroneous where Dr. Choate is made to say that *nursing* from an insane

mother would in his opinion increase the liability of the prisoner to become insane. The question was raised, and his opinion was the reverse. He thought it fair to assume, however, that the liability would be greater if the mother were insane during conception and gestation, than if she had been so only previously or subsequently.

It appears in the evidence of both experts that it is not *insanity* that is transmitted, but *liability* to insanity. But Dr. Jarvis testified that children of insane parents "are of inferior cerebral organization, more liable to disease, and a smaller cause would produce insanity in them." This is not true of *all*, and may or may not apply to a given case. No predisposition at all may be inherited, and the *tendency* is toward the healthy type.

In charging the jury, the Chief Justice expressed his opinion as to the value of expert testimony in general, regarding it as impaired by the tendency to partizanship often apparent. The only sufficient remedy for this (as is ably stated in the article on Medical Evidence in a recent number of this JOURNAL), is providing that the experts be appointed to aid the court, instead of being called by counsel. This plan has been tried in France and England before now; and what amounts to practically the same thing, now obtains in this State in regard to cases of insanity occurring in the State Prison. The opinion of the medical expert acting as *amicus curiæ*, says Dr. Bucknill, "founded upon a thorough examination of each particular case, would carry conviction with it, and neutralize the sophistries of the bar, the prejudices of the bench, and the ignorance of the jury-box."

N. F.

ON THE PHOSPHORESCENCE OF SEA AND OZONE IN CONNECTION WITH ATMOSPHERIC CONDITIONS. —At the recent meeting of the British Association for the Advancement of Science, Dr. Moffat detailed the result of observations taken at sea, to show that ozone is in maximum quantity with decreasing readings of barometer, and the conditions of the south or equatorial circuits of the atmosphere. He supposed there might be some connection between ozone and the phenomena of phosphorescence of the sea. In this paper, which was read in the Chemical Section, over which Dr. Debus presided, the author sustained his good and well-earned repute as one of the most laborious of inquirers on ozone and its effects.—*Medical Times and Gazette.*

Medical and Surgical Journal.

BOSTON: THURSDAY, SEPTEMBER 30, 1869.

THE RELATIONS OF MEDICINE TO RELIGION.

WE here transcribe for the press, another portion of the unpublished address of Professor E. H. CLARKE, from which we have already drawn.

It is perhaps more difficult to describe the relations of Medicine to Religion than of Medicine to Education, or Law. Yet it is obvious, that between the two, there must be relations of the most intimate character. Before attempting to define any of them, however, let us form some notion of what is meant by religion. I do not mean by it any sect, creed, hierarchy or visible establishment. I refer to the immutable principles of right, which binding man to God, underlie every church and communion. Medicine is the science of physical life. Religion is the science of spiritual life. Medicine teaches the laws of the body. Religion teaches the laws of the spirit. Medicine deals with the material. Religion with the immaterial. Medicine is a part of the divine order of things. Religion comprehends the whole of that divine order. Medicine is to religion what matter is to mind.

In the earliest age, medicine and religion were the same: the physician and priest were one. Among the orientals now they are not divorced. Hakem is the priest of God and doctor of men. When travelling in the East some years ago, I was surprised one morning by a crowd of miserable beings, halt, lame, blind and sick, that had collected around my tent during the night. They had heard of the appearance among them of a physician of the Franks—of a western Hakem—and so came with prayers for relief. They departed sadly and unbelievingly when my dragoman told them I could not heal them. They said I did not choose to go to the God I served. This early faith, which the East still clings to, has in it the germ of a great truth, which now-a-days we are apt to forget, viz.:—that medicine

and religion cannot be wholly divorced from each other, any more than we can divorce matter from mind.

I do not mean to imply materialism by this. Notwithstanding what has been said in some quarters, it may be safely affirmed, that medicine and all science were never more reverent or less materialistic than now. The old sarcasm *ubi tres medici ibi duo athei* is no longer true. The science of to-day believes in the existence of a soul and of a God. It also believes in matter and in the order of nature.

Religion, I have said, comprehends the divine order of things; and medicine touches a part of that divine order. Hence the two must harmonize. The priest and the doctor must not be at variance. Each must allow the reasonable demands of the other. Medicine is reverent, but it is also critical. It is willing to believe, but hates superstition. It loves the truth, but requires demonstration. Herein are to be found the relations of medicine and religion to each other. The former demands no more of the latter than it demands of truth, but it demands as much.

I have called medicine critical, and so it is. It subjects everything to the closest scrutiny. It lays hold of the living and the dead, and traces every form and secret way of life from the lichen up to God. It fears nothing. * * * All bibles, dogmas and mysteries must be yielded up to the keenest dissection. Religion has no monopoly of secrets. Nothing is too sacred for analysis. One relation of medicine to religion, then, is that the latter shall not forbid or curtail the investigations of the former. It is the simple and true relation of freedom.

Again, medicine, as we have seen, has long since discarded superstition * * * * and pretension. It rejoices in the beauty of simple truth. It demands of religion a similar renunciation. It will not bear superstition in the church nor about the sick bed, nor at the hour of death. It christens pretension, quackery, wherever found; and doubtless there are quack priests and quack religions, as well as quack doctors and quack medicines. It demands that religion shall be intelligible and not mysterious. This is not saying that religion is expected to get rid of mystery and explain all the secrets of God. It is only saying that religion, like medicine, shall not require belief in the unintelligible. There is mystery all about us. None recognize this more fully than the physician. He deals constantly with the mysterious and the unknown, but he does not people the darkness with hobgoblins. Where he cannot see he confesses his ignorance, and waits for light. In like manner, religion, if it would consort with medicine or with any science, must be brave enough to say of mystery, I do not know; and when light comes it must be brave enough to use the light, and humble enough to accept what the light reveals. Intelligibility is another relation of religion to medicine.

Once more, medicine demands demonstration. It requires every theory to be proved; every assertion to be made good. It accepts the dictum of no one—authority goes for nothing. Kölliker is obliged to demonstrate the passage of oil globules unchanged from the stomach into the blood, before his statement can be accepted. Bence Jones is obliged to demonstrate the detection by spectrum analysis of $\frac{1}{195}$ millionth of a grain of chlorate of soda in a solution before the possibility of doing so is credited. When the demonstration is made, the fact is accepted, and physiology adjusts itself to the new-found truth. This demand for demonstration—the Apostolic injunction to prove all things—and the correlative demand for the acceptance of whatever is proved, which medicide makes of itself, it also makes of religion. Whatever religion proves, medicine will delight in believing. The doctor always puts the priest to the proof. * * * * Religion, like medicine, must lay aside all superstition, arrogance and dogmatism, and learn humbly to accept whatever can be demonstrated to be a part of the august body of truth. If that is not done, the priest and the doctor will be at variance; and religion will come and live with science. For the closest relation of medicine and religion to each other is that of development. Freedom, intelligibility and development are the only possible foundations and true relations of medicine and religion.

This quotation from Dr. Clarke covers the ground of certain philosophical relations of religion and medicine to each other. There is, however, another broad domain which transcends all philosophy and all science, and which is the peculiar sphere of religion. This region is obviously left untouched in the address. The statements relative to it consist of personal testimony, the credibility of which has its practical tests. Thus certain *experiences* of the inner man in his relation to unseen things are testified to, as revealed only by consciousness (just as sensation is taken cognizance of by perception), and which are *ipso facto* not capable of *demonstration* to others. These statements of individual experience are, however, corroborated by acts and courses of action which cannot fairly be accounted for save by accepting the reality of the facts alleged.

Again, the remarks of Dr. Clarke may be said to refer to the relation between the priest and the physician. In Dr. Latour's introduction to the *Dictionnaire Annuel des Progrès des Sciences et Institutions Médicales* for 1868 is a passage concerning the reciprocal positions of the two professions towards a third party, who is at once the "penitent" and the "patient." That passage we now translate.

He refers to another eminent writer—Prof. Lasègue—as having traced, with boldness and precision, the office not only of the professor but of the physician, in relation to certain disquieting and unanswerable questions. The physician, says Lasègue, has his allotted task. He knows nothing concerning man, except those things which are comprehended between the moment of his conception and the hour of his death. At that hour his scientific mandate expires, as does his social mission. During this time the object of his researches consists merely in the material conditions of existence. Not only has the nature of his knowledge traced this limit, but the common sense of mankind constantly reminds him that he must not transgress it. He is neither the counsellor nor the mentor of any person, in virtue of his science; and if he be summoned, it is, as say the most anti-materialist philosophers, when *the animal* suffers (*quand la bête souffre*). Matter—dead or living—is his domain.

At the bedside of the dying the priest questions the conscience, and the physician feels the pulse. Reverse the two *rôles* and you surpass the absurd. Thus limited, medicine concentrates her studies upon half the problem of the *homo duplex:* but this half belongs to her. The physician is of no authority on the inexplicable question of human free-will, save when he insists upon the necessities which limit it, and teaches how a lesion may instantly transform genius into imbecility. So long as the Judge recognizes the indications of free-will, he maintains his sovereign right of decision. If he has recourse to the authority of the medical expert, it is because he feels that an obstacle more imperious than all reflection, that an impulse which bears down all resistance, has annulled with one blow both the freedom of the will and the responsibility of the defendant. A situation thus framed commands us all to be either pupils or masters.

Advertisements of Specialists. *Mr. Editor,*—I have been requested to call attention to and refute the following, which appears as an editorial note in the report of the American Medical Association meeting, published in the June number of the *Richmond and Louisville Medical Journal:*—

"Sichel, Donders, von Græffe, &c., placard the streets with their advertisements, and, in Edinburgh, specialists have their specialty engraved on their door-plates."

In this section of the country perhaps too many of our profession have been abroad to require me to do more than in general terms to assert that the above allegation is erroneous as regards the distinguished ophthalmic surgeons mentioned; though local authorities and custom require or permit some procedures in Europe not tolerated here.

The American Medical Association, at its late meeting, adopted the following resolution:—

"*Resolved,* That private handbills, addressed to the members of the medical profession, or advertisements in newspapers or in medical journals, calling the attention of the professional brethren to themselves as specialists, be declared in violation of article one, section three, of the Code of

Ethics of the American Medical Association."

The American Ophthalmological Society declares, in its Constitution, "No member of this Society shall attach to his name, in any public announcement, the title of oculist, or any similar title, or shall announce in print that he gives special or exclusive attention to special practice."

This law is strictly carried out, and two members were dismissed from our Society for violating it, at the late meeting at Newport, in July. Respectfully,

B. Joy Jeffries, M.D.

Boston, Sept. 20, 1869.

Niemeyer's Text-Book of Practical Medicine*—Apoplexy.—We presume a simple announcement of a book bearing Niemeyer's great name is sufficient without an extended bibliographical notice. But, as one of the readers of the Journal has written for the latest advices on the subject of *apoplexy*, we quote for his benefit some passages from the chapter denominated "Cerebral Hæmorrhage—Apoplectic Stroke—Apoplexia Sanguinea." We think, too, that a specimen of the translation may not be unacceptable to others.

"*Etiology.*—Cerebral hæmorrhages almost always occur from the smaller arteries or the capillaries of the brain, and are caused partly by structural disease of the arterial walls, partly by an anomalous condition of the part of brain surrounding the vessels, partly by increased pressure of the blood against the wall of the vessel. The bleeding most frequently occurs when several of the factors act together.

"The structural changes in the walls of the vessels, to which their abnormal fragility is due in most cases, are the results of endarteritis deformans, which was treated of in the first volume. This explains the frequency of apoplexy in persons over 40 years of age, which was noticed even by *Hippocrates*. Next to this, simple fatty degeneration of the arterial walls, not dependent on inflammation, but occurring in badly nourished cachectic and chlorotic persons, also induces greater fragility and ruptures of the cerebral vessels. Still we must say that fatty degeneration of the finer cerebral arteries is found far more frequently than would be expected from the proportionately rare occurrence of apoplexy. Occasionally, rupture of the entire arterial wall is preceded by rupture of the inner and middle coats, while the adventitia still resists. In such cases the blood escapes between the external and middle coats, and small dissecting aneurisms are formed. Lastly, there are cases where abnormal weakness of the cerebral vessels must be supposed, although it cannot be proved. These are the rare cases where cerebral hæmorrhages are found in convalescents from typhus and other acute infectious diseases and during scorbutus.

"We have already mentioned that, in necrotic softening of the brain, capillary hæmorrhages not unfrequently occur along the borders of the softened part. Frequently, gradual atrophy of the brain causes dilatation and final rupture of the vessels. While the brain-substance disappears, a vacuum cannot form in the skull; hence increase of the cerebro-spinal fluid and dilatation of the vessels are necessary results of senile or any other form of atrophy of the brain, which is a frequent sequel of the most varied forms of disturbance of nutrition. Perhaps the frequency of apoplexy in advanced age depends at least partly on this circumstance, and there is no doubt that the atrophy of the brain, which is in many cases caused by the first apoplectic attack, has something to do with the frequent recurrence of apoplexy.

"The increased pressure of the blood on the walls of the vessels, by which the latter are ruptured, may depend on any of the causes which we indicated in the first and second chapters as causes of hyperæmia. The frequent occurrence of apoplexy during long and luxurious meals, tends to show that the hyperæmia of the brain induced by temporary plethora is one of the most dangerous forms. Hypertrophy of the left ventricle, particularly that form resulting from any extensive endarteritis deformans, plays an important part in the ruptures of cerebral vessels. In the latter case two dangerous factors unite—the morbid fragility of the vessels and the increased pressure of the blood on them. Moreover, small arteries, in which there is otherwise a regular pressure of the blood, and whose walls also maintain a nearly equal tension during the systole and diastole of the heart, pulsate when there is extensive atheromatous degeneration, and at every systole of

* A Text-Book of Practical Medicine, with particular reference to Physiology and Pathological Anatomy. By Dr. Felix von Niemeyer, Professor of Pathology and Therapeutics, Director of the Medical Clinic of the University of Tubingen. Translated from the Seventh German Edition, by special permission of the Author, by George H. Humphreys, M.D., &c. &c., and Charles E. Hackley, M.D., &c. &c. 2 vols. 8vo. Pp. 770. New York: D. Appleton and Company.

the heart the normal medium tension of their walls is decidedly increased. It will be readily understood that this circumstance also increases the liability of the vessels to rupture. Cerebral hæmorrhages so often depend on the complication in question, that, in doubtful cases, the discovery of hypertrophy of the left ventricle and of an atheromatous degeneration of the arteries may decide the diagnosis.

"Apoplexies occur at all times of the year; occasionally, without any known cause, cases accumulate remarkably. They have also been observed at all times of the day, and statistical tables have been made of their comparative frequency at morning, mid-day and evening. Although advanced age furnishes the largest number of cases, apoplexy does occur even among children. Men are somewhat oftener attacked than women. There is no such thing as an apoplectic constitution, indicated by a short neck and broad shoulders. * * * *

"It is usually supposed that the apoplectic fit is a result of the pressure or bruising of the nerve-filaments and ganglion-cells of the entire brain by the extravasation. However, it is evident that this pressure can never exceed that of the blood in the cerebral arteries; for, as soon as the pressure in the parts around the arteries is as great as that of the blood in the vessels, no more blood can escape from the latter. But, from experiments that we can make on the peripheral nerves, there is no doubt that such a pressure is entirely insufficient to annul the excitability of the nerve-filaments. * * * * We refer the apoplectic fit to sudden compression of the capillaries, that is, anæmia of the brain-substance. In all large hæmorrhages this anæmia may not only be recognized with certainty after death, but even during life it shows itself by a very important symptom, which is usually falsely interpreted, that is, by a remarkable pulsation of the carotids. This symptom is very generally regarded as a sign of 'increased pressure of blood to the head,' although it really indicates that the flow of blood into the skull is obstructed; we may at any moment induce the same phenomenon in the artery of the finger by tying a string tightly around the end of the finger. All diseases of the brain and its membranes affecting the space in the skull enough to prevent the escape of blood from the afferent vessels — not only large effusions of blood, but also abundant exudations and transudations, large tumors, &c.—are accompanied by increased pulsation of the carotids. If we find this symptom, when there is no hypertrophy of the left ventricle, nor corresponding pulsation in other arteries, it will, in doubtful cases, be a great aid to the diagnosis of some brain-disease encroaching on the cranial cavity.

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"*Treatment.*— * * * * If a patient has had one attack of apoplexy, he must be particularly careful to avoid all causes by which the cerebral vessels may be overfilled and distended; he must especially avoid long, luxurious meals, and must keep his bowels regular.

"If cerebral hæmorrhage has occurred, it becomes our object to prevent a continuance of the bleeding, to induce re-absorption of the extravasation, and the formation of an apoplectic cicatrix. But we must not deceive ourselves as to our power, and must understand that we have no remedy for arresting the hæmorrhage, or for hastening the re-absorption and cicatrization. In the treatment of this disease we are restricted to combating the more dangerous symptoms as well as possible. Not a few patients, in apoplectic fits, recover consciousness during venesection, and it seems as if we could, not unfrequently, prevent the extension of the paralysis from the cerebrum to the medulla oblongata, which is indispensable to life, and so save the patient by bleeding. On the other hand, there is no doubt that, in many cases, bleeding during an apoplectic fit hastens a fatal result; collapse occurs immediately after the venesection, and the patient never arouses. We have previously said that bleeding must always prove beneficial, if the symptoms given as signs of pressure on the brain were actually induced by the pressure to which the brain is subjected by the extravasation; and we have also said that the want of success in venesection, in many cases, spoke against this explanation. From the explanation that we have given of the apoplectic fit, it is evident that, under some circumstances, venesection is a very useful remedy; under others it is very injurious, and the indications for it may be very exactly given. In order that as much arterial blood as possible may enter the brain, we must try to facilitate the escape of the venous blood, without, however, diminishing the propelling power too much. If the impulse of the heart be strong and its sounds loud, if the pulse be regular, and no signs of commencing œdema of the lungs exist, we should bleed without delay. Local bleeding by leeches, behind the ears, or to the temples, or by cups to the back of the neck, cannot replace gene-

ral bleeding, but they may be used as adjuvants. If, on the contrary, the heart's impulse is weak, the pulse irregular, and rattling in the trachea has already begun, we may be almost certain that bleeding would only do harm, since the action of the heart, which is already weakened, would be still more impaired, and the amount of arterial blood going to the brain would thus be still more decreased. When the latter state occurs, the symptomatic indications require just the contrary treatment, in spite of the original disease being the same, and being due to the same causes. We must strive with all our skill, by the use of stimulants, to prevent paralysis of the heart. If we cannot give wine, ether, musk, &c., internally, we should apply large sinapisms to the chest and calves of the legs, rub the skin vigorously, sprinkle the breast with cold water, or drop melted sealing-wax on it.

"If the patient has recovered consciousness after the apoplectic fit, we simply prescribe a mild, unirritating diet, keep the bowels open, and cover the shaved head with cold compresses, so as to prevent, if possible, too severe inflammatory reaction. According to the severity of the inflammatory symptoms which, nevertheless, occur, we may continue this simple treatment, and at most give a purge, or apply leeches behind the ears, and repeat the application if necessary. In this stage venesection is superfluous and dangerous. On the other hand, especially when the fever-symptoms have moderated, good is done by derivatives to the nape of the neck, such as blisters and pustulating ointments, which subsequently are no more to be used.

"If the stage of inflammatory reaction has happily passed, and the patient is pretty well, except the paralysis, we should avoid prescribing strychnia and other remedies, which are neither theoretically nor practically useful, but should regulate the diet and bowels, and place the patient under the best possible hygienic influences. Well-to-do patients may be sent to Wildbad, Gastein, Pfäfers, or Ragatz. We must not hope that the destroyed filaments of the brain will be restored by the use of these waters, but experience shows that, at these places, both cerebral and spinal paralysis often improve; probably this improvement is due to the favorable influence of the baths on the inflammation about the clot, and on that portion of the paralysis due to it.

"Lastly, it cannot be denied that paralyses are generally improved by the employment of the induced current of electricity. This is doubtless solely because "faradisation localisée" is one of the most powerful means of therapeutic gymnastics. After paralysis has lasted some time, its degree almost always depends partly on diminished excitability of the nerves, and on commencing atrophy of the muscles from long disuse. For both of these states the methodical excitement of the nerves by the induced current is certainly the best remedy, and, at all events, it deserves the preference to irritating liniments, salves and tinctures."

THE HARVARD AND OXFORD BOAT RACE.—The victory of the Oxford crew over their gallant antagonists from America is due doubtless to many causes, but, above all, to their better style and "form;" and these words, being translated into matter-of-fact language, mean that the Oxford men could breathe better than the Harvards. It is with man as with a steam-engine. If a spurt is to be put on, the fire must be poked up, there must be a good draught of air, and free vent for the smoke. If during violent muscular exertion there be not a good supply of oxygen, the combination of it with carbon, which is the source of force, is checked; and the same imperfect mechanism that interferes with the indraught of oxygen checks also the outgoing of the stifling and oppressive smoke known as carbonic acid, while at the same time the heart, which pumps, cannot do its work unless there be free passage through the lungs. Now the action of the Oxford men allowed for the freest breathing possible under the circumstances. Sitting in good form, giving the widest possible play to the muscles of inspiration, they could inflate their lungs well as they bent forward, empty them gradually as they raised themselves in pulling, and enjoy a moment of repose as they bent forward for the next stroke. The Harvard men sat in worse form; in pulling they swayed their bodies too far backwards, instead of the calm forward movement of the Oxford men. Their style was jerking, spasmodic and hurried, compared with the slower and more powerful stroke of the Oxonians—a jerk which interfered with the act of inspiration, and which took away that short but precious repose which their adversaries enjoyed between their strokes. How precious that almost inappreciable interval of rest is between the two successive acts is shown by the distress which ensues when the heart is deprived of it by imperfection of the aortic valves. This, of

course, was aggravated by the more rapid stroke. The act of Mr. Burnham, the American coxswain, in splashing water into his friends' faces, was judicious: it is an effective mode of getting a deeper, fuller breath, but it is no substitute for good form. Nothing could be more gentlemanly than the demeanor of the Harvard men, but they affected a secresy about their proceedings, would not let their weight be known, brought their own black cook to prepare all their food, and drank far more freely of water than is usual here. It is a pity that they refused English teaching, although, consciously or not, they drifted in the course of practice into a far more English style than they started with.—*Medical Times and Gazette.*

The physiological deductions of the *Gazette* from the data assumed are undoubtedly sound; the only question is about the correctness of some of the premises. We suspect that the Harvards would have made better time—good as that actually made was—and might have kept up their "fearful pace" to the end, had not two of their number been out of condition, from change of climate, or some other cause. Greater familiarity with the course, too, might have improved the steering of the coxswain. We will add that we are informed by an eye-witness who was on the umpires' boat that the Harvards, when in the advance, avoided giving the wash to their competitors, and thus apparently encountered an unfavorable eddy. That the Oxfords did not reciprocate the courtesy, which they did not feel themselves bound to return, is not put forth as a ground of complaint. The same informant states that the English oarsmen seemed to strive as hard the last quarter of a mile as they did the first. It strikes us the question of the best form is still an open one.

Ligature of the Aorta in Edinburgh.—On Friday, the 6th inst., Dr. Patrick Heron Watson tied the aorta on account of secondary hæmorrhage from the common iliac artery after ligature. The iliac had been tied nine weeks before with catgut, under the most careful antiseptic precautions, and employing similar after treatment. In spite of this, internal hæmorrhage set in, distending the iliac fossa and cavity of the pelvis, and escaping partially by the yet unhealed incision.

The artery at the point of ligature was found to be completely divided, but no trace of the catgut ligature was discovered. The diseased condition of the arterial tunics precluded the application of a ligature to the stump of the iliac. Dr. Watson, therefore, plugged the vessel with his forefinger, took off the Dubois' aortic tourniquet, made an incision in the linea alba, opened the cavity of the abdomen, turned aside the bowels, cut through the mesentery, cleared the aorta half an inch above the bifurcation, and, carrying a ligature round it with a common aneurism needle, secured the vessel with a common silk ligature. He also secured the external and internal iliac branches upon the affected side, so as to prevent recurrent bleeding.

The patient went on well for the first forty-eight hours, but after the sixtieth hour gradually sank, dying sixty-five hours after the operation—living, however, longer than any of the eight recorded cases, except the one of Monteiro, in which the patient survived the operation ten days.

The operation was undertaken merely to prevent inevitable death from hæmorrhage, which must have proved instantly fatal unless the ligature of the aorta had been performed. No further bleeding took place. The limbs regained their temperature after the operation, but before death the left limb (the side on which the iliac had been tied) had sunk in temperature some six degrees below the other, as high, at least, as the knee; above this the temperature was the same on both sides.*—*Medical Press and Circular.*

The Suez Canal.—In his annual report on the sanitary condition of the population concerned in this undertaking, M. Aubert-Roche states that this is most satisfactory, the mortality, except in the year of the cholera, having been maintained as low as 1 per cent., while in France it is 2.40 per cent. He points out the great increase of European population that is taking place. In 1859 the population of the isthmus amounted to only 150 persons, of whom only 25 were Europeans. Last year there were 34,258 individuals, of whom 16,010 were Europeans, and 18,248 *indigènes*, and, at the present time, there are 42,400 inhabitants, of whom 22,823 are Europeans.

* Sir A. Cooper first performed this operation in 1817. Since that date it has been done twice by Mr. James, of Exeter, and once by each of the following surgeons—Murray, at the Cape; Monteiro, at Rio; South, in London; Hunter McGuire, of Richmond; and Watson, Edinburgh.

During his ten years of Medical inspection public health has been constantly improving; but this has been brought about by a great sacrifice of Medical officers, for of 11 *chefs de service* who have taken part in the enterprise only 5 survive.—*Union Méd.*, Aug. 17.

Poisonous Odors.—*L'Union Médicale* is very positive on the subject of the deleterious action exercised by the perfume of flowers, especially such as the lilac, jessamine, hyacinth, tuberose, on persons who have the imprudence to leave them at night in the bed-chamber. The more or less fictitious cases of suicide and assassination, which have been related under this head, should not induce us to doubt the reality of the asphyxiating power possessed by strongly smelling flowers. Certain odoriferous fruits share the same deleterious property.

We read in the *Union Bourguignon*, of Dyon, that a grocer who had slept in a small room, in which the contents of three chests of oranges had been piled up, was found asphyxiated in the morning, and was only resuscitated by the most energetic treatment.

Our readers will also recollect a case not long since reported, of death resulting from the odor of quinces, which occurred from sleeping in a room where a large quantity of them were kept.—*Dublin Medical Press and Circular.*

Rattlesnake Bite Treated with Opium.—We make the following extract from a letter to the Editors of the *Medical Archives*, St. Louis, Mo., from Dr. R. T. Short:—

"On the 20th of July I was incidentally called to see a lad aged 17, who had been bitten by an average sized prairie rattlesnake (crotalus), (massasagua). On examination, two punctures were visible in the sole of the right foot, which was evidently the point bitten. The patient was comatose, pale and cold; skin dry and very sensitive, the slightest touch being followed by a slow but general vermicular movement over the whole surface; lower limbs paralyzed; pulse 20 at the wrists and very feeble; pupil largely dilated. Not having with me any *specific* for snake bite I was compelled, as usual, to rely on regular remedies. It being now too late to prevent the absorption of the poison, I determined to make use of opium to fulfil the indications presented. Accordingly, about 4 o'clock, P.M., I gave 2 grains opii pulv. At 6 o'clock repeated the dose; pulse 32; at 8, repeated the dose, pulse 50; at 10 o'clock, repeated dose, pulse 65, slight perspiration; as 12 o'clock gave last dose, 2 grs., pulse 80; pupil contracted to normal size. About 3 o'clock the patient waked up as from a healthy sleep, and asked for something to eat; allowed him a good sized meal. Said he felt well in every respect; continued awake until 2, P.M., when he began to complain of feeling weary. Pulse gradually sunk to 18, when the opium was again resorted to, to raise it; 2 gr. doses every two hours for ten hours left the pulse at 85. Medicine discontinued; recovery complete. One remarkable feature in the case was that the opium at no time exerted its characteristic soporific influence—perspiration was excited both times. The opium was of excellent quality, I know, having used out of the same package for more than a year. * * * * * *

The Author of Thesaurus.—Dr. Peter Mark Roget, who died in England on Friday, at the age of 90 years, was a Swiss by origin, and his mother was a sister of Sir Samuel Romilly. He stood high as a physician, but is best known by his valuable "Thesaurus of English Words and Phrases," and his contribution to the Bridgewater Treatises on "Animal and Vegetable Physiology." He wrote various mathematical papers, and contributed largely to the medical and philosophical reviews. His great work of English words and phrases was revised and enlarged by Barnas Sears in 1854, while he was Secretary of the Massachusetts Board of Education, and published by Gould & Lincoln. It has passed through several editions since, and though it was the first work of its kind, the completeness of its plan and its fulness of details left little to be supplied.—*Boston Evening Transcript.*

Early Man.—The communication by Dr. Woodward, read at the Exeter meeting, on the recent discoveries in Essex, will, we suspect, dispose a good many people to modify their opinions on the subject of geological time. In the same deposit are remains of the stone, bronze, and iron ages, together with earthen pottery, and the remains of the beaver, the reindeer, the gigantic ox (*Bos primigenius*), the mammoth, and the elk. A people who made earthen pots, some by hand and some turned on the wheel, do not suggest the idea of a very remote antiquity.—*Medical Times and Gazette.*

Medical Miscellany.

Tomato Worm.—Dr. Fuller, of Syracuse, the Carthage *Republican* informs us, "has in his office a tomato worm measuring five inches in length, and weighing an ounce. It was taken from a tomato vine in his garden, and is now securely enclosed in a glass bottle. It eats and digests twenty times its own weight of tomatoes and tomato leaves. It eats constantly, except resting occasionally from one to two minutes. This worm was first discovered this season, and is as poisonous as a rattlesnake. It poisons by throwing spittle, which it can throw from one to two feet. This spittle striking the skin, the parts at once commence to swell, and in a few hours death ends the agonies of the patient. Three cases of death in consequence of this poison have recently been reported. The medical profession is much excited over this new enemy to human existence. It is advisable for persons picking tomatoes to wear gloves. The question arises whether or not a tomato partly devoured by one of these vermin, and then afterwards eaten by a person, may not have sufficient virus left upon it to poison the one who eats it?"

If this story cannot be contradicted emphatically and at once, the amount of land devoted to the culture of tomatoes in this part of the world will be suddenly and rapidly reduced. We do not care to give hospitality to visitors who eat twenty times their own weight, and whose saliva is a deadly venom.—*N. Y. Times.*

We hope some who knows will set the matter at rest authoritatively.

Morality of Paris and the Provinces.—The following statistics touching the proportion of illegitimate births in Paris during the year 1867—the latest on the subject—will perhaps have some interest for our numerous subscribers:—

Legitimate children - - -	39,572
Natural children - - - -	15,472
Total births in 1867 -	55,044

The proportion between the legitimate and natural children is as 2.56 is to one, or, in other words, there are born in Paris for every one natural child, two and a half legitimate.—*New York Medical Record.*

Production of the Metallic Percussion Sound.—According to Dr. O. Heubner (*Archiv der Heilkunde*, 3 Heft), the best method to educe the metallic percussion sound in pneumothorax is to lay firmly upon the thoracic wall a hard narrow pleximeter, and to percuss with an equally hard inelastic plexor. A very weak stroke suffices.—*Ibid.*

Goitre Cretinism.—M. Garrigon, consulting physician at the Mineral Springs of Aix, asserts that certain endemics are due to the existence of magnesia, and more especially to the silicate of that earth, in the soil, which modifies all organisms, both vegetable and animal. His doctrine is based upon extensive observations made in the districts of the Pyrenees where such maladies are endemic, and are coincident with such geological constitution.—*Dublin Medical Press and Circular.*

Prof. Boehm—Dissection Wound.—The *Union Médicale* of September 7th states that at that date Prof. Boehm, of Berlin, had probably ceased to live. Eight days before, he met with a slight dissection wound, of which he took no notice. Two days after, the hand became swollen, and fatal symptoms soon set in. The distinguished victim contemplated his fate with the utmost tranquillity of mind.

A Definition.—The compositor at this office finds *Traumatic* defined in Johnson's and Worcester's Dictionaries "A medicine to heal wounds—useful for wounds." Dunglison, as we know, gives a different meaning. The true interpretation it may prove desirable for medical disputants round about to settle.

MEDICAL DIARY OF THE WEEK.

Monday, 9, A.M., Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.
Tuesday, 9, A.M., City Hospital, Medical Clinic, 10, A.M., Surgical Lecture. 9 to 11, A.M., Boston Dispensary. 9–11, A.M., Massachusetts Eye and Ear Infirmary.
Wednesday, 10, A.M., Massachusetts General Hospital, Surgical Visit. 11 A.M., Operations.
Thursday, 9 A.M., Massachusetts General Hospital, Medical Clinic. 10, A.M., Surgical Lecture.
Friday, 9, A.M., City Hospital, Ophthalmic Clinic; 10, A.M., Surgical Visit; 11, A.M., Operations. 9 to 11, A.M., Boston Dispensary.
Saturday, 10, A.M., Massachusetts General Hospital Surgical Visit; 11, A.M., Operations.

Erratum.—The leading paper in our last issue on the Treatment of Typhoid Fever by the Reconstituents, was translated from the French by W. O. Johnson, M.D., from a pamphlet sent him by S. F. Cones, M.D., U.S.N.

To Correspondents.—Communications accepted:—Dislocation of the Trapezoid.—Review by C. W. S.—Dislocation of the Elbow.—Records of Obstetrical Society.—Internal Administration of Chloroform in Congestions.—Post-partum Hæmorrhage.

Pamphlets Received.—The Orleans Infirmary and the Medical Association of New Orleans. *Dat veniam corvis, vexat censura columbas.*—Catalogue of Graduates of Jefferson Medical College of Philadelphia. 1826–1869.—Address delivered by Isaac Ray, M.D., of Philadelphia, on the occasion of laying the Corner Stone of the State Hospital for the Insane, at Danville, Pa., Aug. 26, 1869.

Deaths in Boston for the week ending September 25, 114. Males, 61—Females, 53.—Accident, 3—disease of the bladder, 1—inflammation of the bowels, 1—congestion of the brain, 2—disease of the brain, 5—inflammation of the brain, 1—bronchitis, 1—cancer, 1—cholera infantum, 20—consumption, 13—convulsions, 2—croup, 4—cyanosis, 1—debility, 1—diarrhœa, 5—dropsy, 1—dropsy of the brain, 2—typhoid fever, 5—gallstones, 1—disease of the heart, 4—infantile disease, 1—intemperance, 1—disease of the kidneys, 1—congestion of the lungs, 1—inflammation of the lungs, 5—old age, 7—paralysis, 2—phlebitis, 1—pleurisy, 1—premature birth, 2—puerperal disease, 3—purpura, 1—suicide, 1—syphilis, 1—teething, 1—tumor, 1—unknown, 8—whoop. cough, 2.
Under 5 years of age, 53—between 5 and 20 years, 5—between 20 and 40 years, 26—between 40 and 60 years, 15—above 60 years, 15. Born in the United States, 82—Ireland, 21—other places, 11.